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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applic	ant:	Chennakeshu, S.	)	
Serial	No.:	09/237,356	)	
Filing	Date:	January 26, 1999	)	
Art Unit: 2631			)	Confirmation No.7645
Examiner: Kumar, P.			)	
			)	
Title:	Reduced Complexity MLSE Equalizer For )		For )	
	M-ary Mod	ulated Signals	)	

Commissioner for Patents Post Office Box 1450 Alexandria, VA 22313-1450

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Technology Center 2600

Sir:

## RESPONSE

This is a continuing response addressing the non-final Office Action mailed January 9, 2004 for the above captioned case.

## **REMARKS**

The Examiner has rejected claims 1 - 5, 9, and 13 under 35 USC 102(b) based on U.S. Pat. No. 5,673,294 to Namekata.

Namekata focuses its efforts on channel tracking in an MLSE equalization environment. It employs a two-step process comprised of a non-recursive least squares (LS) algorithm for obtaining initial channel estimates followed by a recursive least mean squares (LMS) algorithm that utilizes the results of the LS step. The combined LS/LMS processing approach is designed to yield a more efficient MLSE algorithmic approach for obtaining a branch metric that has faster convergence and requires fewer calculations.